

	<p>NatuRA</p>
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Type of company: University of Antwerp

What are the core activities of your company (mark with a cross):

Supply of resources	Production	Harvest	Downstream processing	Use of algae (products)
			X	

## 1. Company profile

Describe:

- NatuRA is a research consortium for the research of natural compounds and their activities. It is a collaboration between three specialized labs: the Lab of Pharmacognosy, the Lab of Pharmaceutical Analysis and the Lab of Nutrition and Functional Food Science.
- This consortium has 3 full professors, 3 postdoc researchers, 10 PhD students and 2 technical coworkers.

## 2. Algae based activities

Not yet.

## 3. Market supply

### Purification of Natural Compounds

With a **flash chromatography** system, a **preparative LC-MS** system and a **semi-**

**preparative SFC-MS** system, the consortium has an advanced technology to isolate and purify natural compounds in a fast and effective way.

#### Structure-activity relationship

An **LC-SPE-NMR** and **LC-MS** metabolomics platform for structure-activity relationship investigations on natural products as new lead compounds is built up in the consortium. Metabolomics involves the combination of up-to-date technologies such as LC-MS (Liquid Chromatography – Mass Spectrometry) and LC-NMR (Liquid Chromatography – Nuclear Magnetic Resonance spectroscopy) with modern information technology such as **PCA (Principal Component Analysis)** to process large amounts of data.

#### Bioavailability and Metabolisation

A **gastrointestinal dialysis model** was developed in the Laboratory of Nutrition and Functional Food Science. This model with an initial gastric stage, followed by an intestinal stage is much faster, less expensive and easier to perform compared to *in vivo* tests, and helps in resolving the mechanism of metabolisation and the identification of the metabolites of active compounds, in combination with **LC-MS** and **LC-NMR** techniques.

## 4. Market demand

Partner for research projects.

## 5. Contact data

	Name	Mart Theunis
	Company	University of Antwerp
	Department	NatuRA
	Address	Universiteitsplein 1, A1.14 B-2610 Antwerp
	Telephone number	+32 03 265 27 20
	Mobile number	
	Fax	+32 03 265 27 09
	e-mail	mart.theunis@ua.ac.be